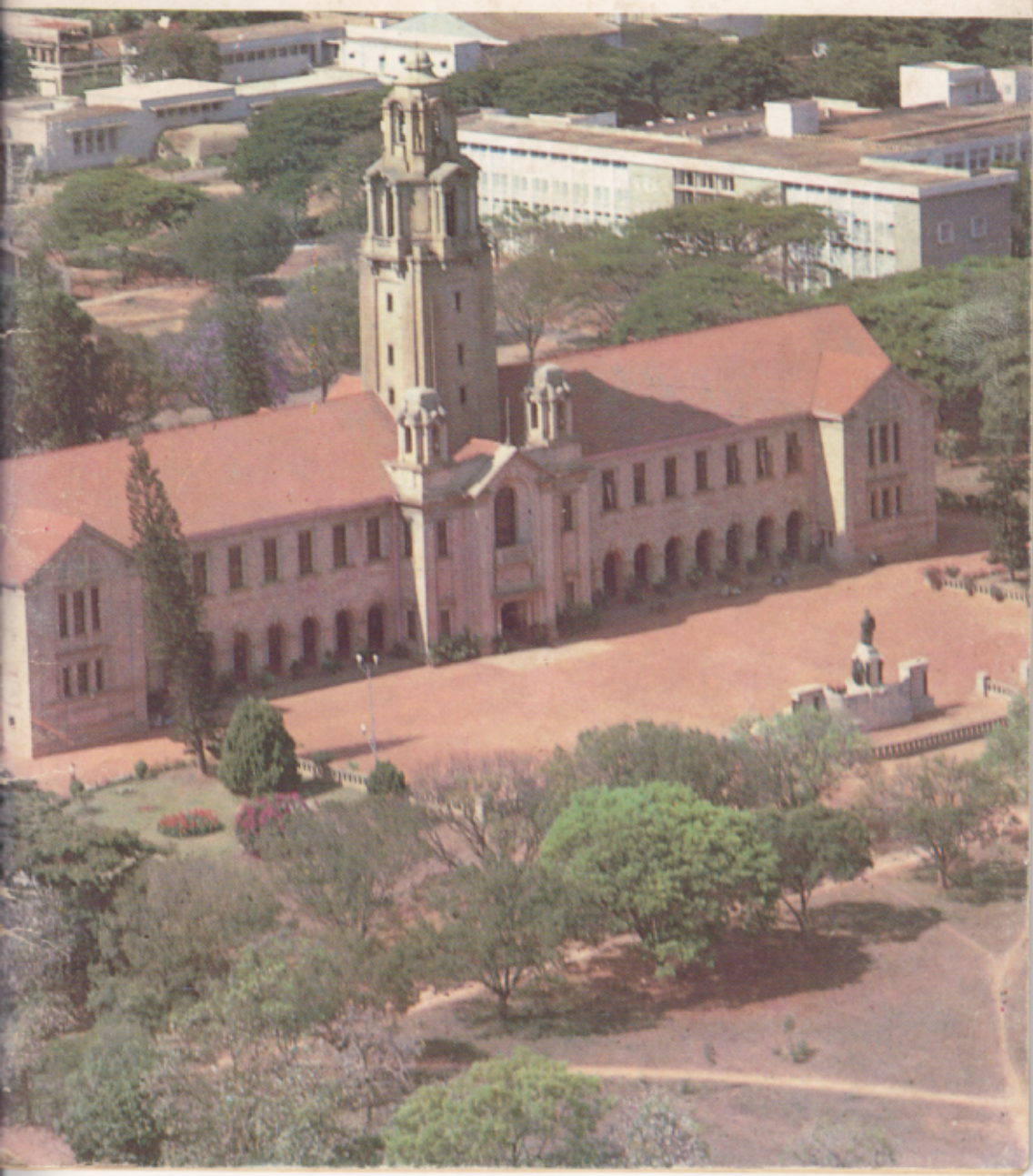




LAND USE MASTER PLAN

INDIAN INSTITUTE OF SCIENCE, BANGALORE



PREFACE

LAND USE MASTER PLAN

A technical study of the campus and its surrounding area has been completed by Mr. A. Sridharan, Planning Officer, Government of Karnataka, and Mr. S. S. Srinivasan, Planning Officer, Government of Karnataka. The report of the Committee on the subject of the campus and its surrounding area is being prepared in order to provide a basis for the future development of the campus and its surrounding area. The report also contains a detailed description of the campus and its surrounding area and its present and future development. The report is being prepared in order to provide a basis for the future development of the campus and its surrounding area.

The Government of Karnataka has confirmed its support for the development of the campus and its surrounding area and we now have a promise of land for the third campus of the Institute.

Funding support from the University Grants Commission, the Ministry of Science and Technology, Government of India and the National R&D Organisation is gratefully acknowledged.

March 1992

INDIAN INSTITUTE OF SCIENCE

March, 1992

Director



PREFACE

A technical assessment of the present utilisation of this campus and projections for the future has been carried out by a Committee chaired by Prof. A. Sridharan. Prof. M.N. Srinivasan, Chief (Planning) and Mr. K.C. Reddy, Adviser, Project, Planning, Construction and Maintenance were the moving force behind such a study. Based on the report of the Committee, this document has been prepared in order to provide important guidelines to future Directors and Planners of the Institute and to ensure that the unique character of the campus ecosystem and its greenery are not badly affected in the environs of this fast-growing metropolis. May the verdant campus remain so not merely at the turn of this century, but for many more decades to come.

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C.N.R. Rao
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COMMITTEE

Constituted by the Director to work out a Land-Use Master Plan for the campus, vide Memorandum Dir C 27, dated 27 August 1990.

Prof A SRIDHARAN	Chmn Mech Sc (Chairman)
Prof BS SONDE	Chmn Elec Sc
Prof V KRISHNAN	Chmn Chem Sc
Prof G PADMANABAN	Chmn Bio Sc
Prof N MUKUNDA	Chmn Phy & Math Sc
Prof MN SRINIVASAN	Chief (Planning)
Mr KC REDDY	Adviser PPCM
Prof TR KASTURI	Dean Science Faculty
Prof R KUMAR	Dean Engineering Faculty

IMPORTANT GUIDELINES

- 1 Construction in the campus, however small – even of a shed, **should not** be undertaken without consulting the Master Plan.
- 2 Extension to an existing building, however small, **should not** be undertaken without consulting the Director.
- 3 Buildings **should not** be built in the campus in the space reserved for the green belt.
- 4 There is very little place left on the east side of the campus for the expansion of the engineering departments, except for the small area in the vicinity of the Rocket Test House. This space has to be used carefully.
- 5 Administrative buildings **should not** be built in the front or back of the Central building. Administrative buildings should be located elsewhere as shown in Master Plan.
- 6 The area from the Central building to the Director's bungalow must be kept as a green forest for ever.
- 7 No tree should be cut without authorisation. Only the Director has the power to authorise felling of a tree, if absolutely essential.

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- ⑦ No trees should be cut without authorisation. Only the Director has the power to authorise felling of trees. It is absolutely essential.

THE LAND USE PLAN

INTRODUCTION

The Seventh Five Year Plan period saw unprecedented construction activity in the campus. The Eighth Plan contemplates sizeable activity. It therefore becomes necessary to take stock of the land available and relate it to the future growth plans, based on the established principles of campus development.

A Land Use Plan is a necessary initial step towards preparation of a Master Plan. Recognising the importance and the need for a Land Use Plan, the Director appointed a Committee with Prof. A. Sridharan as Chairman and requested the Committee to submit a report on the various facets of the Master Land Use Plan.

The Committee had several sittings (Sep. 10, 20, 27, Oct. 10, 23, Nov. 13 and Dec. 11, 1990) and inspected the campus. The Committee discussed the paper presented by Mr. K.C. Reddy, Adviser, Project, Planning, Construction and Maintenance and the tentative proposals (**Annexures I to IV**). The Committee held discussions with the Warden of the Students' Hostel, Registrar and the Librarian and elicited their views on various relevant issues.

The following are the salient features of the report of the Committee.

GENERAL

"It is difficult to precisely forecast the future development associated with an Institute of higher learning such as this. However, it is possible to make use of a broad guideline for growth in order to relate the future projects. Taking into consideration the land available for future use, the plan has to be developed recognising the future development of the Institute academically, functionally, administratively and conceptually. While doing so, a review of the existing facilities by way of class rooms, laboratories and infrastructure facilities is essential so that the future plans may eliminate the existing deficiencies as far as possible.

Although one may feel that there should first be a short-term projection followed by a long-term projection, it is not so simple or straight forward to arrive at such plans; to say clearly what is short-term and what is long-term in the life of a campus is not easy. The view that the past trends should provide one of the guidelines for forecasting future development is also debatable. A variety of inputs to assess future growth in the areas of administration, student population, academic expansion have been taken into consideration.

In the present exercise, planning has been limited to around 2000 AD so that the long-term planning beyond 2000 AD, may be taken up some time in 1998. This seemed to be the compromise solution affording reasonable flexibility.

We should first take note that the land available in the campus is getting to be limited.

Keeping in view the optimal use of land and economy in construction, it is considered necessary to **construct/plan all buildings for ground plus two floors.** Wherever there are buildings now with either ground floor only or ground plus first floor, invariably the construction of second floor should be examined before use of land is contemplated.

1. REQUIREMENT OF DEPARTMENTS

Land utilisation for academic expansion within the present campus in the next ten years should be marginal and the immediate need is reorganization and consolidation of existing buildings. However, the area that can be developed for the most essential academic needs and requiring to be located in relatively close vicinity of existing academic buildings is on the western side of the campus which could be integrated with the buildings along the Gulmohar Marg. Presently the **area bound by Tala Marg, Javanica Marg, Silver Oak Marg and the eastern compound wall is fully developed and densely built-up and there should be no further buildings in this area and all the open spaces should be covered by tree growth.**

To enable opening up of areas for departmental development, expansion and location of new disciplines, **a new main road is planned.** This road will serve the area concerned in addition to segregating traffic from the housing complex and thereby ease the traffic congestion of Gulmohar Marg. This will incidentally help the effective use of the Library facilities; the small stretch of road forming a neck on the western side of Director's bungalow will get some relief.

2. LIBRARY

The present Library building is located in an ideal place to serve as a central facility but susceptible to the largest volume of traffic that the campus attracts. It is recognised that there is a definite need for extra space but there is no land contiguous to the existing Library. It is ideal to locate the adjunct in a place where environmentally it is attractive for intellectual activity – such a place being the area now occupied by Registrar's bungalow. The site is eminently suitable for Library activities. Such activities of Library which

can be independent of present Library can be located in a new (remodelled) building. The new Registrar's bungalow can be designed as a ground and first floor block and can be located at "R" marked in the Map (appended), i.e. at the entrance leading to Duplex Quarters.

3. STORES

The essential need to have Engineering and Chemical Stores and Store Management in a central area is keenly felt. It is considered that the best location for this activity would be to convert/remodel/improve the existing Mechanical Engineering Workshop as soon as the Mechanical Engineering Dept. shifts to its new location.

4. HOSTEL ACCOMMODATION

The student intake should be restricted or efforts should be made to regulate the growth of student population to restrict it to below 2000 in 2000 AD and the planning of land use has been done on this basis.

Keeping in view the objective of the Institute, the post-doctoral fellows' strength was arrived at 200; and the composition of the student population of 2000 is expected to comprise of 65% men students, 25% women students and the remaining 10% married students. Men and women students should have single seated rooms, and so also should post-doctoral fellows. Efficiency apartments have to be planned for married students. The Hostel area has to be rezoned so that the men students' hostels are located between Madhuka Marg and Arjuna Marg. The Women students' hostel is zoned towards the northern side of Madhuka Marg and the realigned road to the new A&B type quarters under construction to replace the 'lines'. The married students' apartments and efficiency apartments could be in the mixed zone as at present. To effectively implement the above

zoning, the present women students' hostel (Ashwini) should be converted into men students' hostel, and instead a new hostel should be built for women students in the new zone.

The A B C D blocks of men students' hostel ought to be dismantled; the resulting court yard can then accommodate 2 self-sufficient hostel blocks, each accommodating 200 men students with self-contained dining, kitchen facilities, etc. The other two blocks to accommodate 200 students each should be located between Mandhara Marg and Arjuna Marg. The existing Canara Bank building with columns strutting out is out of place in its present location. Therefore the first floor over the Bank building could be completed so that the ground floor and first floor can be made use of for hostel administration. The Bank could be shifted to a new location facing the proposed circle close to Tata Memorial Club. A small shopping arcade could be located facing the same circle, so that sundry items like toothpaste, blades, cosmetics etc. are available nearby. All the staff quarters on either side of Arjuna Marg should be dismantled to make way for the new hostel zone. An assessment of the resources necessary has been made only to establish the fact that land will not be a constraint.

5. HOUSING

The important issue of the need for increased housing in the campus and the various facets of the problem have been identified. Economics of housing, the level of satisfaction as at present, the implications and impact of increased housing in the campus on the academic activities and progress have been thoroughly examined. Taking note of the activities contemplated under housing during VIII Plan, it is firmly felt that the essential need is to freeze housing activities during the IX Plan period.

6. HEALTH CENTRE

There is **no need for any extra land** for the Health Centre as it is essentially a primary health centre.

7. ADMINISTRATION

The need for a **centralised administration block** close to the main building is recognised. The building should be designed to accommodate the Registrar, all the Deans and Divisional Chairmen, Chief of Planning, Deputy Registrars and Asst. Registrars and the offices of Students, Admissions, Schemes, Public Relations, Placement, Purchase, etc. The present Bungalow No. 1 with additional three floors, suitably and aesthetically designed to integrate with existing Bungalow No. 1 may be located in the corner plot just behind Bungalow No. 1. Then Bungalow No. 2 could be converted into some activity relating to academic infrastructure.

8. ROADS AND FOOT PATHS

The development of a **main road on the western side** is very essential to rationalise the traffic distribution, open up areas for development and safeguard boundary. Wherever there is need for foot paths, they have been identified to improve circulation in the campus and reduce traffic in high density routes. The paths would cater to the needs of pedestrians and two wheelers only. Mini-forest development in the marshy area and tree planting in all the open areas have been identified.

9. OTHER ACTIVITIES

Gymkhana

Basically the Land Use concept, zone-wise, should be such that there is no construction in Gymkhana area except the Visitors' House of the J.N. Centre, the proposed Student





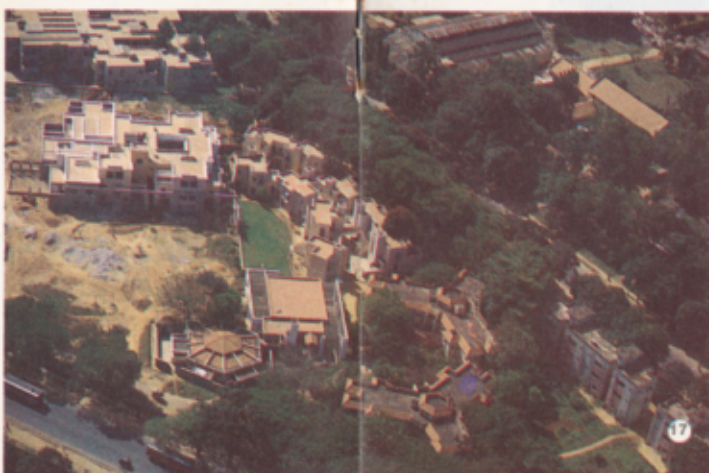
1. CIE, SERC, CAS (f), MRC, ChE, SSCU (b)
2. Phy, Lib, AsE
3. CV Raman Avenue, HVE (1), Solar Pond, ME, EE, Met (r)
4. Tala Marg, Chemical Scs (r), Lecture Halls (l)
5. Academic
6. IPC, MBU, CTS, MA

7. SERC, EE, ME,
8. Hostels
9. Swimming Pool
10. NIAS at northwest
11. CEDT
12. Vigyanapura
13. Men Students' Hostel, Health Centre, JN Centre
14. Tata Statue, Quadrangle
15. Housing (f), ECE, TIFR (b)
16. Track Oval - Gymkhana (r)
17. Inst. Dining, Krishnaraja, JN Visitors, Post-doc Hostel
18. Area A (f), Main Bldg (b)

Photos: K. Sivarudrah

f - front b - back
l - left r - right





SUMMARY OF RECOMMENDATIONS:

1. Policy of the Institute should be to have all future constructions as ground plus 2 floors (or more where possible/necessary).
2. The A B C areas marked in the Map must remain as they are and retain their extent, shape and grandeur.
3. No further development/buildings in the area of the main academic complex.
4. No further development in Gymkhana, Central School and CSIC/Seminar Complex areas.
5. Library annexe should be in the plot adjacent to nursery, and Administration block adjacent to Bungalow No.1.
6. Canara Bank to be relocated as indicated.
7. Mini forest should be grown in the marshy area, and tree group planting and periphery planting should be done as indicated in the plan.
8. The paths and roads to be formed as and when resources permit.
9. Land areas marked X & Y in the Map should be reserved for development beyond 2000 AD.
10. Land Use Plan to be reviewed in 1998.

ACKNOWLEDGEMENT

To formulate a conceptual **LAND USE PLAN**, several inputs needed on the development of infrastructural facilities, increased activities of departments, administration, hostels and on the nature and magnitude of futuristic projections, have been obtained from various concerned authorities. The Committee expresses its thanks to all those who have cooperated and helped to finalise the Land Use Plan of the campus.

THE INDIAN INSTITUTE OF SCIENCE CAMPUS LAND USE MASTER PLAN



Legend

- ABC No buildings of any kind Green forest
- AD For future academic buildings Near 28:
Engineering Departments
- XY Reserved for development beyond 2000 AD

Location of :

- R Registrar's residence
- S8 Stores
- S Student Amenity Centre
- L Library Annexe
- 27 Administrative building

ANNEXURE I

Questionnaire

To elicit views and obtain information

I. ADMINISTRATION & STUDENT ADMISSION

1. What is the present overall intake of students and what is it proposed to be by 2000 AD?

II. TEACHING & RESEARCH

1. How many students are studying in each Department/Centre at present?
2. Is the existing space for class rooms adequate to meet the present needs?
3. If not, what is the extra space needed to meet the current shortage?
4. Is it envisaged to increase the annual intake of the students joining courses in each department in the next 10 years or so, i.e. by 2000 AD? If so, how many anticipated?
5. What is the additional space envisaged for each department by the next 10 years by way of:
 - (a) Lecture hall
 - (b) Laboratory space
 - (c) Staff rooms
 - (d) Faculty rooms
 - (e) Other facilities
6. Is it necessary and practicable to locate additional space for the facilities at (5) above/

near your existing department? If not, where else can the construction be proposed? Do you prefer to shift the entire department to a different area in the campus to accommodate additional requirement of space?

7. Can we quantify approximately the additional residential accommodation needed in the campus for each department:
 - (a) to ease the problem of residential accommodation
 - (b) to take care of growth in students, academic and other staff due to probable expansion by the end of the century?
 - (i) Students in hostels
 - (ii) Students in mess
 - (iii) Students & others in cafe
 - (iv) Quarters to faculty and staff
8. Is the building complex departmentwise/disciplinewise that exists now satisfactory or is there any need to modify/alter?
9. Is the present building capable of expansion vertically or

in the place adjacent, if available?

10. What is the maximum number of floors recommended for comfortable use for new buildings in the campus without lifts for individual buildings?

11. What should be the looks of new buildings in the campus: modern, ancient, stone facing, brick facing, flat roof, sloping roof?

12. How should these be integrated with the existing buildings in the campus?

III. HEALTH CENTRE

1. Is the present accommodation of the Health Centre adequate to meet the needs of the patients?

2. Can all the out-patients be attended to effectively and quickly within a reasonable time by the present team of doctors or is it necessary to increase their number? Can they be housed within the existing space or extra rooms needed?

3. How many beds are there at present? Are they adequate? Would it be necessary to increase them?

4. What are the infrastructure facilities expected within the next 10 years?

(a) Necessity to construct a new/additional hospital within the next 10 years

(b) Augment the existing facilities

(c) What is the construction programme envisaged for the medicare of students, staff and faculty by the turn of the century by way of:

(i) Operation theatre

(ii) Specialist facilities

(iii) In-patient facilities

(iv) Out-patient facilities

(v) Waiting room

(d) Whether residential facilities have been provided to all the Doctors and other staff employed in the Health Centre? If not, how many are still to be provided?

(e) How many additional Doctors and supporting staff are anticipated in the next 10 years, i.e. by 2000 AD and what is the residential accommodation needed or anticipated by that time?

IV. CENTRAL SCHOOL

1. What is the present strength of students?

2. Is the accommodation for all the classes adequate?

3. If not, what is the extra space needed for:

(a) class rooms

(b) teachers' room

(c) playground

(d) other amenities

4. What is the expansion anticipated by the turn of the century?

5. Additional construction programmes required to meet the anticipated demand? Can it be identified?

6. Is there space/scope for future expansion and development in your present location?

V. FACULTY HOUSING

1. What percentage of staff, category-wise should have residential accommodation?

2. In the new housing area how should grouping be - designation-wise/status-wise?

3. Should the faculty housing and staff housing be in separate areas?

VI. MESS FACILITIES, CAFETERIA, GYMKHANA, STUDENT AMENITIES, RECREATION FACILITIES AND OTHER GENERAL AMENITIES

1. What are the present facilities in the existing campus on all these items and what are the improvements that can be effected?

2. What arrangement can be made to provide place for

lunch for staff who bring lunch from home?

3. How to segregate the traffic intended for academic area only and separate it out from the traffic bound for housing area to relieve the academic areas from noise and congestion?

4. Where should the car parks (criteria for location) cycle parks and two wheeler shed be located?

5. Should there be shelter for them or can they be in open?

6. How do we make security more effective in the campus?

7. What are the suggestions, equipment, necessary to make fire fighting services alert - training necessary - where are fire hydrants?

8. What are the arrangements for fire fighting inside the building?

9. Is the present campus considered over crowded? How do we modify?

10. What is wrong in the planning of the present campus? What are the suggestions to modify/change/improve the campus?

11. Should DG sets be maintained by the concerned departments or the Exec. Engineer (Elec) should maintain them?

12. Should the air-conditioning plant, airconditioners maintained by the departments concerned or by the Exec. Engineer (Elec.)?

ANNEXURE II

Land Use Master Plan

PROPOSAL

1. The development and use of land of the IISc main campus has been contemplated recognising the suitability of the area, proximity to the desired activities, importance of the activity, the zoning based on purpose/utilisation of the area, inter-departmental interactions and the feasibility of extension of infrastructure facilities and keeping over all the use of the entire campus. In so doing, the possible resources needed/available till 2000 AD, which is considered a reasonable period to which we shall attempt to foresee, has been kept in view. The various long term futuristic needs are likely to be clearer by 1998 and scope should be left to replan/review at a time when this vision becomes clearer. It is therefore, considered essential that a review by the end of 1998 should be made to give scope for rethinking and giving a direction to development beyond 2000.

2. Keeping in view the discussions and also the various activities and efforts on which the Institute should concentrate and mobilise resources, it is felt absolutely necessary not to develop any further housing in the campus and should strictly be avoided.

Present exercise is to identify the land use, and it is to be over stressed here this cannot form a physical conceptual plan for the next 10 years.

This is neither linked to the resources available nor the resources that are likely to be available.

DEPARTMENT/LABORATORY SPACE

It was the consensus that the land that would be necessary in the present campus for the on-going activities of the department and laboratory in the next 10 years is only marginal and the need is reorganisation and consolidation of usage of existing buildings. But however, as far as land use is concerned it is felt that for new disciplines that are likely to come up in the Institute, the area should now be earmarked taking into consideration the overall development of the campus spreading out to open areas to safeguard our boundary and also keeping in view the minimum expenditure on infrastructure facilities. It is proposed to develop the land to accommodate new disciplines along the boundary line on the western side upto the 'D' gate. Development in this area would give further scope to increase the land that might become available for academic purposes. It is also felt that academic development for new discipline should integrate their activities with bungalow nos. 8,9,10 and 11 so that the areas beyond the Library and Physics Department along and on the western side of the

Gulmohar Marg would become purely academic areas.

The reorganisation of space in the existing academic buildings does not require identification of land use and each department reorganisation has to be taken up individually after detailed thought, interaction and design.

Regarding location of the Central Animal Facility instead of experimental animal facility in each department, the most suitable location would be the area that is available adjacent to the Primate Research Lab.

STUDENT HOSTEL/FACILITIES

It was agreed that the student and post-doctorals in-take may be planned to be augmented to 2200 with the following break-up:

Students	2000
Postdoctoral Fellows	200

Out of 2000, 10% is for married students in the form of efficiency apartments, 25% for women students and 65% for men students, considering that all students will have single room accommodation. The dismantling of ABCD blocks will result in diminishing student accommodation by 145 and therefore this has to be taken as an additionality. As for post-doctoral fellows, 100 is for single post-docs and 100 for married students. To satisfy these needs, and after

taking into account the accommodation available at present and the ABCD blocks which are to be dismantled, we would need additional accommodation of 600 rooms for men students, 300 rooms for women students and 225 efficiency apartments for post-docs/married students.

It is normally the standard and desirable to have postgraduate students' hostel in units of 200 rooms so that they will have independent kitchen and dining facilities.

Taking the student accommodation as a whole, the zoning can be divided into 3 categories – area earmarked for (1) men students' hostel, (2) women students' hostel and (3) efficiency apartments for post-docs/married students. The reorganisation of the area contemplated is that the women students' hostel accommodation could be on the northern side of the Arjuna Marg. The area on the southern side of Arjuna Marg can be earmarked for men students' hostels. The portion which is contiguous to the married apartment blocks be earmarked for efficiency apartments. The women students' hostel on the southern side of Arjuna Marg, which accommodates 61 students, could be taken over for the men students' hostel and a new block constructed to locate the women students in the zone now contemplated. While there is sufficient area to fit into this concept, it would be worth while to examine the possibility of having one more floor on all the existing hostels to bring the

skyline of the area into a more or less uniform pattern. All the new constructions should have ground floor plus two floors as a general rule in the campus.

Details of hostels for men and women students and efficiency apartments for post-docs/married students proposed to be constructed are given in **Annexure III**.

CENTRAL FACILITY/HEALTH CENTRE

The major requirement of this group appears to be the space required for Administration and Library. As far as Administration is concerned, it is necessary that it is to be close to the seat of the Director and the complex has to include Deans, Divisional Chairmen, Finance, Academic/Student Sections, Transport, Despatch etc. The ideally suited location would be the complex to be housed behind Bungalow 1, integrating the bungalow with the new complex suitably designed.

The additional area considered essential for Library in the next 10 years was indicated to be in the order of 3000 sqm. This is a huge requirement. While debating on the various options a view emerged that it is possible to locate some of the activities which need space by constructing an adjunct to the Library. Unfortunately there is absolutely no space near about the Library to accommodate this requirement. The present Library

is situated in a place susceptible to the largest volume of traffic that the campus attracts. But the building itself is a beautiful building serving the needs of the Library very efficiently and effectively. There can be two schools of thought, one is to locate the adjunct in a new area and the area most suitable for such an activity from the point of view of least disturbance, academic atmosphere and environment, is the one next to where the Registrar's Bungalow is situated and Bungalow 2 can be remodelled to accommodate the residence of the Registrar. Another alternative is to construct an absolutely new library in the same site proposed for the adjunct and use the present Library building to house the administrative complex, including Deans, Divisional Chairmen, Finance and all necessary activities.

It is generally accepted that if it is possible to locate the Engineering and Chemical Stores in one place and also place the Purchase with them, the stores and purchase management would be more efficient and the movement of bills, etc. would be restricted to a compact place. Since this facility has to be centrally located, it is very difficult to find land for locating new facility. One suggestion would be to remodel the Mechanical Engineering Workshop, which will also give adequate place for store yard which could be court yard like and not expose the outdoor store to important view, in other words hiding it. But this can be taken up only

when the Mechanical Engineering Department shifts to its new location, which will be in the near future. The other possibility is to locate this integrated facility in the area adjacent to Rocket Test House and behind new Central Animal Facility building.

No land would be necessary for the Health Centre except that they need a first floor over the existing building.

For the Central School area an overall requirement view has already been taken and a master plan has been prepared and approved by the Director. There should be no other development/building construction in the area except construction of overhead water tank and a sump for water supply. In the Gymkhana complex, apart from the Student Amenity Centre and the Visitors' House of the JN Centre, there should be no construction activity except the RCC overhead tank for Post-doctoral Hostel complex. In fact there should be extensive tree plantation in this area and also the Central School area.

The heart and life blood of the campus are the areas, A, B and C, marked in the Map (appended), and have to be retained in the present form as long as the campus exists. If at all anything has to be done and when the Institute can afford, it should be dismantling of the building now occupied by Finance and raise a nice garden in its place.

The area bound by the national highway and the road connecting the

circles in front of the IISc main gate and ICE gate is fully developed and no building should be planned to be constructed. Ultimately the bungalows nos. 13 to 16, facing the national highway have to yield place to satisfy the future needs of the National Science Seminar Complex. It is also felt that maximum development of academic area, in fact over-development, has taken place in the area bound by Javanika Marg, Tala Marg, Silver Oak Marg and BEL Road on the eastern side. No further extension should come up in this area and group planting has to be encouraged in the area now left without building so that extension and new construction will become impossible.

The existing tree growth has not been identified and shown. But the proposed mini forest, tree planting along avenues, double row planting along the peripheral compound wall and group planting in few areas and two new gardens have been proposed in the locations indicated in the Map to improve the landscape and environment of the campus.

It is suggested that these concepts are thoroughly discussed by the Committee before arriving at a consensus and thereafter finalise report on the Land Use Plan.

The Committee may also indicate the necessary steps to finalise a Master Plan for implementation upto 2000 AD. The approximate costs of construction of hostels, apartments and additional space for Library,

Administration, Health Centre and Stores contemplated are given in **Annexure IV**. As already stated elsewhere in the paper, the cost does not have relevance to the land use pattern at least for the time being and it can be seen from the magnitude of the

resources necessary that land would not become a constraint but the situation all the more focusses on the need for development of a Land Use Plan and develop the same in stages systematically and functionally to improve the aesthetics of the campus.

ANNEXURE III

HOSTELS/APARTMENTS FOR STUDENTS

(Requirement by 2000 AD)

I. Men Students (Single Rooms)

A. Requirement:	Number
i) 65% of 2000	1300
ii) PD Fellows	100
	1400
B. Existing rooms:	957
i) Hostel:	777
ii) PD Hostel:	180
C. Balance required	443
D. Additional requirement due to proposed demolition of ABCD Blocks	145
Total of C & D	588
	say 600

II. Women Students (Single Rooms)

A. Requirement:	Number
25% of 2000	500
B. Existing rooms	207
C. Balance required	293
	say 300

III. Post-docs/Married Students (Efficiency apartments)

A. Requirement	Number
i. 10% of 2000	200
ii. PD Fellows	100
	300
B. Existing apartments	75
C. Balance required	225

ANNEXURE IV

COST OF NEW CONSTRUCTION REQUIRED

I. HOSTELS

(a) Men Students

Requirement: 600
(Single rooms)

Sq. m.

Accommodation per student as per UGC norms 10

Carpet area: (600 × 10 sqm) 6000

Plinth Area including all facilities like, kitchen, dining, corridor, toilet, etc. (6000 × 2.5) 15000

Cost of construction (@ Rs.4000/sqm) 15000 × 4000 Rs.600 lakhs

(b) Women Students

Requirement: 300 (Single rooms) Sq.m.

Accommodation per student: 10

Carpet area (300 × 10) 3000

Plinth area including all facilities (3000 × 2.5) 7500

Cost of construction 7500 × 4000 Rs.300 lakhs

(c) Post-docs/Married Students

Requirement: 225 (efficiency apartments) Sq.m.

Existing area of each apartment: 45

Cost of construction: 225 × 45 × 4000 Rs.405 lakhs

ABSTRACT

I. HOSTELS Rs. in lakhs

Single rooms for men students including PD Fellows 600

Single rooms for women students 300

Efficiency apartments for Post-docs/Married students 405

Total: 1305

II. LIBRARY

3000 sqm. @ Rs.4000 120

III. ADMINISTRATION

3000 sqm. @ Rs.4000 120

IV. HEALTH CENTRE

(First Floor)

500 sqm. @ Rs.4000 20

V. STORES

1000 sqm. @ Rs.4000 40

Grand Total: 1605

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